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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,467	09/29/2006	Stein Kuiper	GB040083	9406
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EXAMINER COLLINS, DARRYL J				
ART UNIT 2873		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/599,467

Applicant(s)

KUIPER ET AL.

Examiner

DARRYL J. COLLINS

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 6, 11-13, 24 and 26-29 is/are rejected.
- 7) ☒ Claim(s) 3, 5, 7-10, 14-23 and 25 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10092007
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Claim Objections

Claims 13 and 22 are objected to because of the following informalities: On page 4, claim 13, line 3, "insiee" should be replaced with "inside". On page 7, first line of claim 22, "radiation" should be replaced with "radiation". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 recites the limitation "the meniscus" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 26 recites the limitation "the stop" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 27 recites the limitations "said colour change correcting means" in line 3, "the non-colourless fluid" in line 1 appearing on page 9 and "the colour of the image" in lines 1 and 2 on page 9. There is insufficient antecedent basis for these limitations in the claim.

Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants attempt to amend claim 27 has rendered the claim indefinite. It appears as though this claim should be rewritten in dependent form or incorporate all and any essential elements of the independent claim to clearly define the instant invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 27 is rejected under 35 U.S.C. 102(b) as being anticipated by Floyd (U.S. Patent Number 5,684,637).

Floyd teaches an optical system (Figure 3) having a color correcting means comprising a dye or pigmentation added to a fluid (column 9, lines 53-54) as claimed in independent claim 27 and as best understood by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 11, 12, 24, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuboi et al (U.S. Patent Number 6,702,483) in view of Floyd (U.S. Patent Number 5,684,637).

Although Tsuboi et al teaches a variable focus lens (column 17, lines 47-48) comprising a first fluid (Figure 1, element 121) and a second fluid (Figure 1, element 122) wherein the fluids

have different indices of refraction (column 17, lines 32-42) and is selectively controlled (column 18, lines 1-9) as claimed in independent claims 1 and 24, Tsuboi et al fails to teach wherein one of the fluids is non-colorless. Floyd, however, teaches a variable focus lens (Figure 3) wherein the fluid is colored (column 9, lines 53-54) such that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the optical element as taught by Tsuboi et al with the colored fluid as taught by Floyd for the purpose of optical filtering.

With regards to claim 2, the use of a dye or pigment is believed to be an inherent feature of a colored fluid.

With regards to claim 4, Tsuboi et al teaches all of the limitations of the instant invention as applied to independent claim 1 above, and further teaches the two fluids as having differing transmittance properties (column 2, lines 25-26). In view of the well known technique of using colored fluids in fluid lenses as taught by Floyd, it would have been obvious to one of ordinary skill in the art at the time the invention was made to color the fluids as taught by Tsuboi et al with differing dyes to provide a specific filtering capability.

With regards to claim 11, it is very well known in the optic art to use various colors (i.e., yellow, red or brown) to achieve filtering of a specific wavelength such that it would have been obvious to one of ordinary skill in the art to use a specific color dye to achieve selective filtering.

Again, Tsuboi et al teaches all of the limitations of the instant invention as applied to independent claim 1 above, and further teaches the second fluid as being axially displaced from the first fluid (Figure 1) wherein the fluids are in contact over a meniscus (Figure 1, element 124), the lens further comprising a first electrode (Figure 1, element 125) and a second electrode

(Figure 1, element 102), wherein the shape of meniscus can be controlled by an applied voltage between the first and second electrodes (column 18, lines 1-9) as claimed in dependent claim 12.

One again, Tsuboi et al teaches all of the limitations of the instant invention as applied to independent claim 1 above, and further teaches the use of such a variable focus lens in other kinds of optical devices (column 20, lines 24-25) as claimed in dependent claims 28 and 29.

Allowable Subject Matter

Claims 6, 13 and 26 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 3, 5-10, 13-23, 25 and 26 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claims, in such a manner that a rejection under 35 U.S.C. §102 or §103 would be proper. Although the prior art teaches a variable focus lens comprising a first and second fluid having different indices of refraction wherein one fluid is non-colorless, the prior art fails to teach such a lens; wherein the color correcting means is a color filter as claimed in dependent claim 3, wherein the dye or pigment has substantially the same level and type of color absorption as the non-colorless fluid as claimed in dependent claim 5, a lens having a non-colorless fluid having a refractive index greater than 1.5 as claimed in dependent claim 7, a lens

having a non-colorless fluid having a refractive index greater than 1.7 as claimed in dependent claim 10, a lens comprising a substantially cylindrical fluid chamber and a fluid contact layer arranged on the inside of the cylinder wall as claimed in dependent claim 13, a lens having at least one pump for altering the volume of the fluid in the fluid chamber as claimed in dependent claim 18, a lens comprising a switchable optical element having a first and second mode including a first and second fluid and a wavefront modifier wherein in the first mode the wavefront modifier is substantially covered by the first fluid and in the second mode the wavefront modifier is substantially covered by the second fluid as claimed in dependent claim 22, or an optical system comprising an electronic image sensor having a means for electronically adjusting the white balance of the image as claimed in dependent claim 25.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DARRYL J. COLLINS whose telephone number is (571)272-2325. The examiner can normally be reached on 6:30 - 5:00 Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Darryl J. Collins/
Patent Examiner
Art Unit 2873

06 March 2008